TITLE OF THE INVENTION

ANT RESISTANT DISH AND TRAY

RELATED U.S. APPLICATIONS

This application supplements and completes Provisional Application 60/467,919, filed May 6, 2003.

BACKGROUND OF THE INVENTION

This invention relates to food service devices that prevent invasion by insects, particularly those intended for use outdoors. This invention is particularly related to insect-resistant pet food dishes.

BRIEF SUMMARY OF THE INVENTION

This invention is designed to substitute for a regular food service dish or tray, but be resistant to invasion by crawling insects, particularly ants. The main mode of this invention is a pet food dish, a "doggie dish", that has a uniquely treated sticky polymer placed strategically on the underside. Insects crawling up the side

of the dish pedestal will encounter this substance and be held and killed. An off-the-shelf organic compound can be added to the sticky polymer as an insect repellant. In most cases, this device will serve as a support plate for a regular food plate.

The invention is designed to be detachable into three main components for easy washing and sticky polymer replacement. The pedestal can be made in various widths to provide support and prevent tipping over in case a large animal is using the dish. Water bowls and food bowls can be fitted on top of this device.

A secondary mode of this invention is a food service tray that possesses a layer of the uniquely treated sticky polymer between its support member and the serving surface of the tray. This tray will permit picnic food to be left out in an unsealed container without worrying about ant infestation. The tray is also designed to be easily washable and permitting replacement of the sticky polymer.

BRIEF DESCRIPTION OF THE DRAWINGS

The construction and operation of the invention can be readily appreciated from inspection of the drawings that accompany this application.

Figure 1 is a perspective view of the pet dish.

Figure 2 is a cross-section view of the pet dish.

Figure 3 is a top view of the food tray.

Figure 4 is a cross-section view of the food tray.

Figure 5 is a bottom view of the food tray.

DETAILED DESCRIPTION OF THE INVENTION

As in Fig. 1 and Fig. 2, the pet dish[100] consists of a bowl[101], pedestal[103], bottom flange[104] and uniquely treated sticky polymer[105]. The pedestal[103] is cylindrical and optionally of various diameters. The bottom flange[104] is a concave, cylindrical inverted bowl that is lined with the uniquely treated sticky polymer[105]. The bowl[101], barrier[104], and pedestal[103] are optionally detachable from

each other to make for easier cleaning and replacement of the sticky polymer[105]. The invention is made entirely from rigid plastic material in the preferred embodiment.

Another embodiment of the invention, shown in Fig. 3, 4, and 5 is a tray[107] with handles[108], an upper surface[113] and a concave lower surface. The lower surface [114], in Fig. 5, consists of a tray edge[109], a tray rim[110], a recess [111], and tray underside[112]. The tray rim[110] extends out from the flat lower surface [114] and should not contact any surface on which the tray will rest.

Outside the tray rim[110] is a recess [111] where the uniquely treated sticky polymer will be placed. The recess [111] is between the rim[110] and the top surface of the tray[113] so that any crawling insects, such as ants, would have to contact the uniquely treated sticky polymer before they can reach the upper surface[113]. This is the preferred embodiment of this tray invention.

Other embodiments including taller rims and different shapes for the tray (circular, diamond-shaped, etc.) are possible. The dish and the tray are related inventions and are close derivatives of each other in that they use a combination of a physical barrier and a uniquely treated sticky polymer to prevent crawling insect infestation.